

10/560135

IAP8 Rec'd PGI/PTO 09 DEC 2005

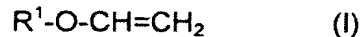
**THE FOLLOWING IS THE ENGLISH TRANSLATION OF THE
AMENDMENTS TO THE CLAIMS OF THE INTERNATIONAL
APPLICATION UNDER PCT ARTICLE 19:**

AMENDED SHEETS (Pages 11 & 12).

We claim:

IAP8 Rec'd PCT/PTO 09 DEC 2005

1. A process for distillatively separating a mixture comprising a vinyl ether of the general formula (I)



and alcohol of the general formula (II)



in which R^1 and R^2 are each independently a C_2 - C_4 -alkyl radical, and in which the alcohol (II) has a boiling point which is at least 1°C higher, measured at or extrapolated to 0.1 MPa abs, than the vinyl ether (I), which comprises

- a) passing the mixture into a first distillation column and withdrawing, as a top product, an azeotrope comprising vinyl ether (I) and alcohol (II) and, as a bottom product, a stream enriched with the alcohol (II);
- b) passing the azeotrope comprising vinyl ether (I) and alcohol (II) from the first distillation column into a second distillation column which is operated at a pressure which is from 0.01 to 3 MPa higher compared to the first distillation column, and withdrawing, as a bottom product or gaseous sidestream in the stripping section, the vinyl ether (I) and, as a top product, an azeotrope comprising vinyl ether (I) and alcohol (II); and
- c) recycling the azeotrope comprising vinyl ether (I) and alcohol (II) from the second distillation column into the first distillation column.
2. The process according to claim 1, wherein the second distillation column is operated at a pressure, measured at the top of the column, which is from 0.1 to 2 MPa higher than the first distillation column.
3. The process according to either of claims 1 to 2, wherein the first distillation column is operated at a temperature of from 75 to 225°C , measured in the bottom of the column, and a pressure of from 0.01 to 1 MPa abs, measured at the top of the column.

Amendments according to Article 19

AMENDED SHEET

4. The process according to any of claims 1 to 3, wherein the second distillation column is operated at a temperature of from 75 to 225°C, measured in the bottom of the column.
- 5 5. The process according to any of claims 1 to 4, wherein the vinyl ether (I) is withdrawn as a gaseous sidestream in the stripping section of the second distillation column in the region of the lower 25% of the total number of theoretical plates.
- 10 6. The process according to any of claims 1 to 5, wherein the vinyl ether (I) withdrawn from the second distillation column as a bottom product or gaseous sidestream in the stripping section is passed into a purifying distillation column and the purified vinyl ether (I) is obtained therefrom as a top product.
- 15 7. The process according to any of claims 1 to 6, wherein a mixture comprising vinyl ether (I) and alcohol (II) is used in which the R¹ and R² radicals are identical.
8. The process according to claim 7, wherein the mixture used which comprises vinyl ether (I) and alcohol (II) stems from the vinyl ether synthesis by reacting the
20 alcohol (II) with ethyne in the presence of a basic alkali metal or alkaline earth metal compound, distillatively removing low boilers and high boilers from the bottom product enriched with the alcohol (II) in the first distillation column and recycling the purified alcohol (II) back to the vinyl ether synthesis.
- 25 9. The process according to claim 8, wherein the distillative removal of low boilers and high boilers from the bottom product enriched with the alcohol (II) in the first distillation column is carried out in a dividing wall column or an arrangement of distillation columns having heat and/or mass transfer.

Amendments according to Article 19

AMENDED SHEET